

## **APPENDIX L**

### **DUST CONTROL PLAN**



**North Baja Pipeline, LLC**

**NORTH BAJA PIPELINE EXPANSION PROJECT**

**Appendix L**  
**Dust Control Plan**

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## Appendix L

### Dust Control Plan

#### 1.0 INTRODUCTION

North Baja Pipeline, LLC (North Baja), will construct the North Baja Pipeline Expansion Project (Project), a new natural gas pipeline from the U.S.-Mexico border to the existing North Baja facilities and the El Paso Natural Gas system in Ehrenberg, Arizona. The Project includes three elements: the B-Line, which includes interconnection facilities in Ehrenberg, Arizona, as well as a 79.8-mile, 42- and 48-inch-diameter pipeline between Blythe and the Mexican border; the Arrowhead Extension, which includes a meter station and a 2.1-mile, 36-inch-diameter pipeline extending from the proposed B-Line at milepost 7.4 to Southern California Gas Company's existing Blythe Compressor Station; and the Imperial Irrigation District (IID) Lateral, a 45.7-mile, 16-inch-diameter pipeline between North Baja's mainline and the IID El Centro Generating Station. The Project will be constructed in phases, with the first phase planned for construction in 2007, the IID Lateral for 2008, and the final phase of the Project in 2009, pending completion of upstream liquefied natural gas (LNG) terminal facilities.

Construction of the proposed facilities will result in fugitive dust. Fugitive dust is particulate matter that is suspended in the air by wind or human activities and does not come from a point source such as a stack. Air quality regulations require the use of control techniques to minimize fugitive dust emissions. The goal is to eliminate visible airborne fugitive dust to the extent possible, given the construction techniques and requirements. This plan is designed to reduce fugitive dust emissions to a minimum from the Project.

There are several reasons to control fugitive dust. First, Imperial County is not currently in compliance with the U.S. Environmental Policy Act (EPA) Clean Air standards with regards to particulate matter under 10 microns or under 2.5 microns (abbreviated PM<sub>10</sub> and PM<sub>2.5</sub>, respectively) (<http://www.epa.gov/airtrends>). Thus it is important that this Project not worsen the existing situation. Second, fugitive dust can cause respiratory distress, not only in the construction workers and nearby residents, but also in nearby wildlife. Fugitive dust can obscure visibility to the point of creating a safety hazard. Finally, fugitive dust can be evidence of soil loss through wind erosion. Fugitive dust can be created directly from the activities involved in pipeline construction, such as vegetation removal, grading, trenching, backfill, or topsoil replacement. Vehicles and equipment moving rapidly on unsurfaced roads and work areas can also create dust, while significant wind action on spoil piles or topsoil storage areas is yet another source of dust.

## **2.0 FUGITIVE DUST SOURCES ON THE NORTH BAJA PIPELINE EXPANSION PROJECT**

Fugitive dust can be created directly from the activities involved in pipeline construction such as vegetation removal, grading, trenching, backfill, or topsoil replacement. Vehicles and equipment moving rapidly on unsurfaced roads and work areas can also create dust, while significant wind action on unprotected spoil piles or topsoil storage areas is yet another source of dust. These activities consist of a series of different operations, each with its own duration and potential for dust generation. In other words, emissions from any single construction site can be expected 1) to have a definable beginning and an end, and 2) to vary substantially over different phases of the construction process. This is in contrast to most other fugitive dust sources, where emissions are either relatively steady or follow a discernable annual cycle.

This dust control plan applies only to fugitive dust generated by construction activities and vehicle trips by support equipment on unpaved roads. These sources are evaluated in the Resource Report 9. Energy use, architectural coatings, and traffic impacts were not quantified because their impacts are not pertinent to, nor subject to, dust control measures. No demolition is required as part of this Project.

### 3.0 APPLICABLE RULES

Pipeline construction will occur in Imperial and Riverside counties, California, and La Paz County, Arizona. The agencies responsible for air quality activities in these counties are:

- Imperial County Air Pollution Control District (ICAPCD)
- Mojave Desert Air Quality Management District (MDAQMD)
- Arizona Department of Environmental Quality (ADEQ)

Permits are not required for pipeline and related aboveground facility construction emissions from any of the above noted agencies. However, there are applicable best management practices that apply to construction emissions identified by the responsible local air quality control agency. Table L-1 lists agency rules.

Table L-1: Fugitive Dust Rules		
Agency	Rule Number	Rule Description
ADEQ La Paz County, AZ	R18-2-604	Construction fugitive dust limitations
	R18-2-605	Road construction fugitive dust limitations
	R18-2-606	Material handling fugitive dust limitations
	R18-02-607	Storage pile fugitive dust limitations
	R18-2-702	Visible emission limitations
	R18-2-802	Off-road machinery opacity limitations
	R18-2-804	Roadway and site clearing opacity limitations
MDAQMD Riverside County, CA	401	Visible emission limitations
	402	Nuisance
	403	Fugitive dust control
IAPCD Imperial County, CA	401	Visible emission limitations
	407	Nuisance
	800-805	Fugitive dust control rules

## **4.0 DUST CONTROL MEASURES IDENTIFIED BY RULES**

Impacts from fugitive dust would be controlled by applying the appropriate control measures (e.g., watering unpaved roads, covering piles, etc) as identified by each air quality control agency having jurisdiction over the construction areas. The following describes dust control measures proposed by North Baja based on the best management practices identified by agencies:

- Take every reasonable precaution to minimize fugitive dust emissions from construction activities.
- Take every reasonable measure to limit visible density (opacity) of emissions (VDE) to less than or equal to 20 percent.
- Apply water one or more times per day to all affected unpaved roads, and unpaved haul and access roads.
- Reduce vehicle speeds on all unpaved roads, and unpaved haul and access roads.
- Clean up track-out and/or carry-out areas at paved road access points at a minimum of once every 48 hours.
- If bulk transfer operations are required, spray handling and transfer points with water at least 15 minutes before use.
- Cover all haul truck loads, or maintain at least 6 inches of freeboard space in each cargo compartment. Insure that all haul truck cargo compartments are constructed and maintained to minimize spillage and loss of materials, and clean or wash each cargo compartment at the delivery site after removal of the bulk materials.
- Apply water to active construction areas to limit VDE to less than or equal to 20 percent.
- Apply water to open and/or unvegetated areas to limit VDE to less than or equal to 20 percent.
- For temporary surfaces during periods of inactivity, restrict vehicular access by means of either fencing or signage, and apply water to comply with the stabilized surface requirements.

## 5.0 ADDITIONAL DUST CONTROL MEASURES

### 5.1 USE OF TACKIFIERS

Use of tackifiers will be limited to spoil and topsoil piles. During construction of the A-Line in 2002, several types of tackifiers and several methods of applying tackifiers were tried with generally unsatisfactory results. Tackifiers were found to work on spoil piles or other locations with no traffic or subsequent disturbance. In areas with repeated vehicle use, however, they were ineffective. To be effective, tackifiers required a compact soil surface, sufficient moisture holding capabilities (*e.g.*, the presence of clays or organic matter), and/or soil structure (*i.e.*, the ionic bonding of soil particles into clods, or “peds”). These soil characteristics were found to be absent for much of the A-Line right-of way especially in desert areas. In many places along the right-of-way, removal of surficial soil exposed a dry, structureless, silty C-horizon. In these soils the individual mineral particles entirely lack adhesion, rendering them highly susceptible to wind erosion. Moreover, the depth, dryness, and poor moisture holding capability of the soils allow them to absorb large quantities of water or water-based compounds without compacting, puddling, or maintaining the particle adhesion necessary to inhibit wind erosion. Similar soil characteristics are found along the IID Lateral.

Additional measures proposed by North Baja related to fugitive dust control near residential and agricultural areas and highways, and cross-country construction are described in more detail below.

### 5.2 RESIDENTIAL AND AGRICULTURAL AREAS AND HIGHWAYS

The main objective of the fugitive dust control effort is to decrease dust emissions. In Imperial County, the objective is to reduce dust emissions below the ICAPCD limit of 20 percent opacity to comply with fugitive PM<sub>10</sub> regulations in Rules 800 through 805 of the ICAPCD. Dust will be controlled so that impacts to adjacent residences are kept to a minimum at all times. Fugitive dust emissions in agricultural and residential areas will be controlled either by the application of water on the construction right-of-way and access roads, by water and tackifier on topsoil and spoil piles, speed control on exposed surface areas, and the mechanical covering of exposed piles with plastic or other wind-resistant covers.

Fugitive dust rules adopted and enforced by the Mojave Desert AQMD will apply to the portion of the construction route within Riverside County, *i.e.*, Rules 401 through 403. These rules are similar in scope and requirements as the ICAPCD rules noted above.

### 5.3 CROSS-COUNTRY CONSTRUCTION

**Topsoil Piles** – For spoils and topsoil piles, a single application of a tackifier (organic polymer) will be sufficient to control dust until these materials are re-applied to the work area. This



compound will be applied once where soil conditions warrant after piles are created as a water-based additive from a spray truck.

**Cleared Right-of-Way and Unpaved Access Roads** – Water without tackifier will be applied as required to reduce dust. Vehicles may travel these areas immediately upon application of water. Given the temperature and humidity conditions present on the right-of-way, puddling of water, if it occurs at all, will be short term.

## **6.0 SAFETY MEASURES FOR DUSTY CONDITIONS DURING ROW CLEARING**

In areas adjacent to highways where dust could cause poor visibility, grading activities will be restricted to prevent unsafe conditions. Restrictions may include applying water as close to earth-moving equipment as possible, slowing the speed of construction equipment, spacing equipment further apart, increased traffic control, or shutting down operations. North Baja will coordinate with the California Highway Patrol to ensure adequate traffic control measures are in place, including the possibility of using flaggers to control traffic if extreme low visibility conditions develop.

## **7.0 MONITORING AND RECORDKEEPING**

Environmental Inspectors are primarily responsible for monitoring and enforcing the need for dust control. The contractor will implement dust control as specified above, and the Environmental Inspectors will be responsible for making sure that dust control is effective and recorded.

## 8.0 RESPONSIBLE CONTACT

The following individual(s) are responsible for the preparation, submittal, and implementation of this Dust Control Plan.

Name	Title	Company	Address	Phone
(Preparation)				
(Submittal)				
(Implementation)				